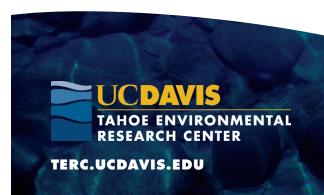


# EDUCATION AND OUTREACH





#### **EDUCATION AND OUTREACH**

## TERC education and outreach

In 2013

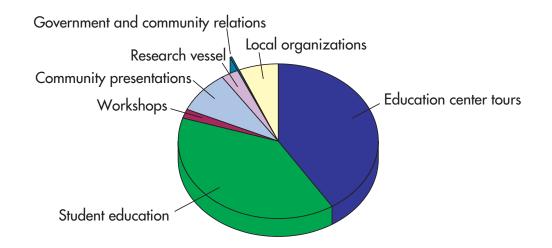
Part of TERC's mission is education and outreach. Our public, K-12, teacher professional development, and volunteer programs are designed to spark the imagination and curiosity of our visitors and participants and to sow the seeds of stewardship of our vital, yet fragile, freshwater ecosystems.

During 2013, TERC recorded 12,105 individual visitor contacts. The majority represented student field trips and visitors to the Tahoe

Science Center (Thomas J. Long Foundation Education Center) at Incline Village. In addition, TERC hosts monthly public lectures and workshops, makes presentations to local organizations and takes a limited number of visitors out on our research vessels. TERC organizes and hosts annual events and programs including Children's Environmental Science Day, Science Expo, Youth Science Institute, Trout in the Classroom program, Project WET workshops, Summer Tahoe Teacher Institute and

a volunteer docent training program.

TERC also partners with numerous groups to deliver environmental science education in the Tahoe basin. In 2013, these included AmeriCorps, COSMOS, North Tahoe Environmental Education Coalition, Sierra Nevada College, Sierra Watershed Education Partnerships (SWEP), South Tahoe Environmental Education Coalition, UC Davis Young Scholars, and many others.



TOTAL NUMBER OF CONTACTS: 12,105



#### **EDUCATION AND OUTREACH**

### **TERC** educational exhibits

In 2013

New activities such as "Why is Tahoe Blue?" and "Measuring Clarity", the new interactive iPad application "Healthy and Unhealthy Lakes", and the game "Race to Save Lake Tahoe" provide Tahoe Science Center visitors with hands-on science focused on Lake Tahoe research and stewardship.

A new 3-D movie "Let's Go Jump in the Lake", funded by the National Science Foundation, will take viewers under the water to look at different organisms that live in the lake and the physical processes that moves them around. Due for completion in fall 2014, the movie will view Lake

Tahoe at different time intervals. These range from a snapshot of a singular moment, the daily routine, and the dramatic change that occurs through the seasons.



"Why is Tahoe Blue?" and "Measuring Clarity" were developed to provide more hands-on activities for science center visitors.



Student evaluators test out the new "Race to Save Lake Tahoe" stewardship board game during exhibit development.



Coming soon: "Let's Go Jump in the Lake" 3-D movie is still under development.



#### **EDUCATION AND OUTREACH**

## **TERC** educational programs

In 2013

In addition to providing education center tours for the general public, the TERC Education Team provides high quality informal science education to more than 4,400 third-through eleventh-grade students by hosting over 80 field trips each year.

Other K-12 educational programs include Trout

in the Classroom, coordinated in partnership with Sierra Watershed Education Partnerships, which is designed to teach students about the ecology, biology, and history of trout and other aquatic life. This year, we raised Lahontan cutthroat trout in an aquarium in the science center. Students from schools around the region

also raised trout for release into local waterways. A small group of select high school students participate in the annual Youth Science Institute from January through May. Through this afterschool program participants work with scientists, conduct science experiments and share science activities with other students.



School groups visit for informal science education programs on water, geology, ecology, and biology, including a new aquatic food web modeling activity.



AmeriCorps member Kristen Reichardt watches as Lahontan cutthroat trout eggs hatch and the small alevins begin swimming.



Youth Science Institute participants from high schools around the region conduct multiple science activities over the 16-week afterschool program.



#### **EDUCATION AND OUTREACH**

## TERC educational programs, continued

In 2013

Each year we train new volunteer docents at our annual June Docent Training. Volunteer docents become local experts and lead tours at our two science centers. Volunteers also participate in garden work each year to make the Tahoe City Field Station's native plant demonstration garden a beautiful community resource.

Visitors that come to our science centers can view exhibits, watch 3-D movies, and participate in citizen science by conducting water quality monitoring, investigating plant phenology, and bird watching. Public participation in scientific research is educational for adults and children and provides useful data for scientists.

Additionally, for the past several years, TERC has hosted a summer Tahoe Teacher Institute for educators from both California and Nevada.



Visitors can wear lab coats for family photos and conduct citizen science including water quality monitoring and plant phenology.



Volunteer docents lead tours at our two science centers and make science come alive for visitors.



Teachers come to Lake Tahoe for the Tahoe Summer Institute to improve their proficiency in environmental science topics and learn new science activities.



#### **EDUCATION AND OUTREACH**

# **TERC** special events

In 2013

TERC hosts monthly lectures throughout the year on various environmental issues, new scientific research and related regional topics of interest. Recent topics have included, "The Art of the Anthropocene", "What's in Your Extra

Virgin Olive Oil?", "Music, Memory and the Brain", and "Lake Tahoe: Climate Change and a Worldwide Crisis for Inland Waters".

Special events hosted annually include Project

WET training workshops (February), Science Expo (March), Green Thumb Tuesdays (July - August), Summer Teacher Institute (July), Children's Environmental Science Day (August), and Earth Science Day (October).



The annual Science Expo held each March brings in more than 1,000 third-, fourth- and fifth-grade students for hands-on science activities that cover a different theme every year. In 2014 the theme was "Earth and Space". Next year the theme will be Life Sciences.



Public lectures are held monthly at the Incline Village location and Green Thumb Workshops are held at the Tahoe City Field Station throughout the summer. Sponsors help make these events free to the community.



Children's Environmental Science Day is held annually each August with hands-on science activities designed for kids ages six and up. Scientists and management agencies from all across the Tahoe basin participate to make this a community event that builds knowledge and develops partnerships.